

Water-Data Report 2008

03208500 RUSSELL FORK AT HAYSI, VA

Big Sandy Basin
Upper Levisa Subbasin

LOCATION.--Lat 37°12'25", long 82°17'45" referenced to North American Datum of 1927, Dickenson County, VA, Hydrologic Unit 05070202, on right bank 180 ft downstream from bridge on State Highway 63, at Haysi, and 700 ft downstream from McClure River.

DRAINAGE AREA.--286 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1926 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1003: 1926-43. WSP 1385: 1928(M), 1929, 1933(M), 1935(M), 1937-38(M).

GAGE.--Water-stage recorder. Datum of gage is 1,237.61 ft NGVD of 1929. Prior to Dec. 21, 1939, nonrecording gage at highway bridge 180 ft upstream, at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. U.S. Army Corps of Engineers satellite precipitation and gage-height telemeter at station. Maximum discharge, 59,000 ft³/s, from rating curve extended above 32,000 ft³/s on basis of slope-area measurement of peak flow. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 6	0630	*9,780	*10.02
No other peak greater than base discharge			

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	15	24	31	86	201	362	197	425	66	93	253	43
2	16	25	29	68	573	433	183	355	79	61	119	36
3	18	26	34	e58	371	374	226	300	74	51	114	32
4	19	26	34	e52	263	376	1,200	258	70	47	73	28
5	21	28	32	44	249	1,440	1,720	215	61	69	54	25
6	21	39	32	47	373	789	5,850	184	56	82	45	24
7	20	31	30	53	739	642	1,880	162	56	61	81	24
8	20	32	32	47	504	934	1,020	158	56	57	143	25
9	35	26	34	52	347	854	721	166	52	108	79	28
10	45	24	72	95	247	688	572	145	48	169	59	49
11	28	23	192	1,260	172	579	490	131	56	121	54	48
12	21	23	104	641	143	494	432	204	57	78	46	36
13	20	26	77	319	197	409	367	182	50	62	41	31
14	19	32	88	221	269	352	331	141	67	113	39	28
15	18	116	88	152	244	360	288	131	150	79	37	26
16	17	113	75	115	224	424	254	136	87	55	35	23
17	16	58	69	110	207	401	234	133	66	45	34	20
18	16	43	55	116	247	399	218	124	56	39	34	19
19	19	37	47	120	233	451	216	131	47	35	32	18
20	27	32	44	e118	215	1,870	289	119	43	32	29	17
21	27	29	54	e116	207	1,190	288	117	41	32	24	17
22	22	33	55	e115	189	799	267	104	43	31	23	15
23	20	36	55	105	194	575	240	91	45	41	26	14
24	37	37	56	94	172	453	219	92	46	47	25	14
25	175	34	58	e87	159	372	211	81	38	38	24	14
26	88	34	52	80	159	321	200	73	36	30	28	14
27	43	41	47	74	178	283	192	70	71	43	68	17
28	29	41	45	66	142	271	348	74	121	43	72	25
29	24	39	98	69	136	240	575	75	88	101	58	26
30	23	36	160	78	---	215	500	71	112	69	48	24
31	25	---	112	71	---	201	---	65	---	236	43	---
Total	944	1,144	1,991	4,729	7,554	17,551	19,728	4,713	1,938	2,168	1,840	760
Mean	30.5	38.1	64.2	153	260	566	658	152	64.6	69.9	59.4	25.3
Max	175	116	192	1,260	739	1,870	5,850	425	150	236	253	49
Min	15	23	29	44	136	201	183	65	36	30	23	14
Cfs/m	0.11	0.13	0.22	0.53	0.91	1.98	2.30	0.53	0.23	0.24	0.21	0.09
In.	0.12	0.15	0.26	0.62	0.98	2.28	2.57	0.61	0.25	0.28	0.24	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	90.6	170	328	508	637	757	614	415	203	160	121	68.0
Max	838	961	1,326	2,083	1,855	2,331	1,994	1,429	1,124	862	561	608
(WY)	(1990)	(1978)	(1927)	(1937)	(2003)	(1955)	(1977)	(1958)	(2004)	(2001)	(1966)	(1989)
Min	0.98	2.46	11.1	19.6	57.7	168	64.0	63.4	21.6	3.03	8.81	2.07
(WY)	(1954)	(1954)	(1954)	(1940)	(1941)	(1988)	(1942)	(1941)	(1966)	(1930)	(1953)	(1943)

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SUMMARY STATISTICS

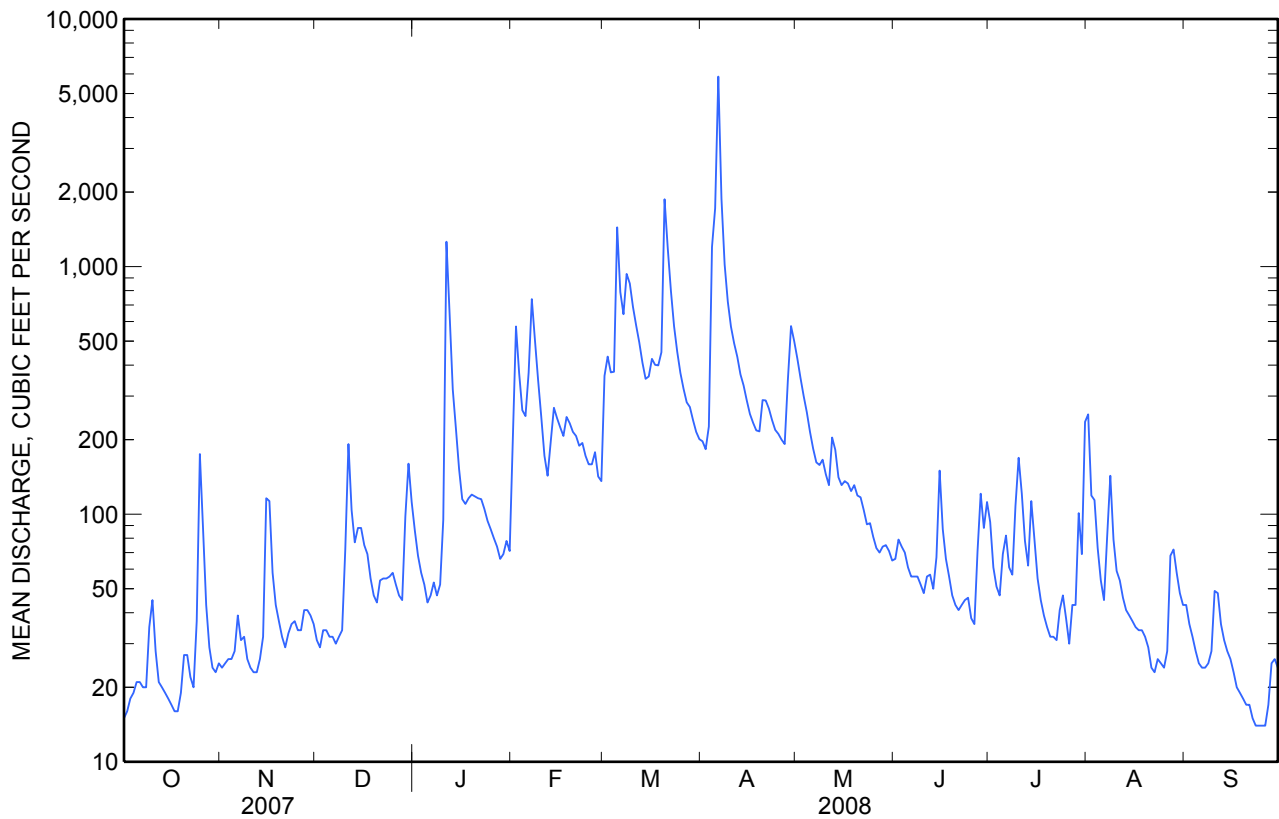
	Calendar Year 2007		Water Year 2008		Water Years 1926 - 2008	
Annual total	90,393		65,060			
Annual mean	248		178		338	
Highest annual mean					568	
Lowest annual mean					100	
Highest daily mean	10,600	Apr 15	5,850	Apr 6	30,600	Apr 4, 1977
Lowest daily mean	15	Sep 23 ^a	14	Sep 23 ^b	0.20	Jun 27, 1936
Annual seven-day minimum	16	Sep 23	15	Sep 20	0.56	Jun 24, 1936
Maximum peak flow			9,780	Apr 6	59,000	Apr 4, 1977
Maximum peak stage			10.02	Apr 6	28.24	Apr 4, 1977
Instantaneous low flow			14	Sep 23	90.20	Jun 27, 1936 ^d
Annual runoff (cfs)	0.866		0.622		1.18	
Annual runoff (inches)	11.76		8.46		16.06	
10 percent exceeds	514		383		737	
50 percent exceeds	85		69		134	
90 percent exceeds	23		24		17	

^a Also Sept. 24-26, Sept. 29 to Oct. 1, 2007.

^b Also Sept. 24-26, 2008.

^c Observed.

^d Also June 28, 1936.



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WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--March 2007 to current year.

INSTRUMENTATION.--Specific conductance and Water-temperature monitor. Electronic data logger with 15-minute recording interval.

REMARKS.--

SPECIFIC CONDUCTANCE: Water year 2007 records fair.

SPECIFIC CONDUCTANCE: Water year 2008 records fair.

WATER TEMPERATURE: Water year 2007 records good.

WATER TEMPERATURE: Water year 2008 records good.

In addition to the continuous specific conductance and water temperature data, several discrete water-quality samples also were collected during the 2007 and 2008 water years.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,250 microsiemens/cm, Oct. 6-9, 2007; minimum, 116 microsiemens/cm, Apr. 6, 2008.

WATER TEMPERATURE: Maximum, 29.7°C, Aug. 9, 2007; minimum, -0.3°C, Jan. 20, 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Water year 2007, maximum, 1,150 microsiemens/cm, Sept. 3; minimum, 299 microsiemens/cm, Mar. 20.

SPECIFIC CONDUCTANCE: Water year 2008, maximum, 1,250 microsiemens/cm, Oct. 6, 7, 8, 9; minimum, 116 microsiemens/cm, Apr. 6.

WATER TEMPERATURE: Water year 2007, maximum, 29.7°C, Aug. 9; minimum, 8.1°C, Mar. 20.

WATER TEMPERATURE: Water year 2008, maximum, 29.3°C, June 8; minimum, -0.3°C, Jan. 20.

03208500 RUSSELL FORK AT HAYSI, VA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

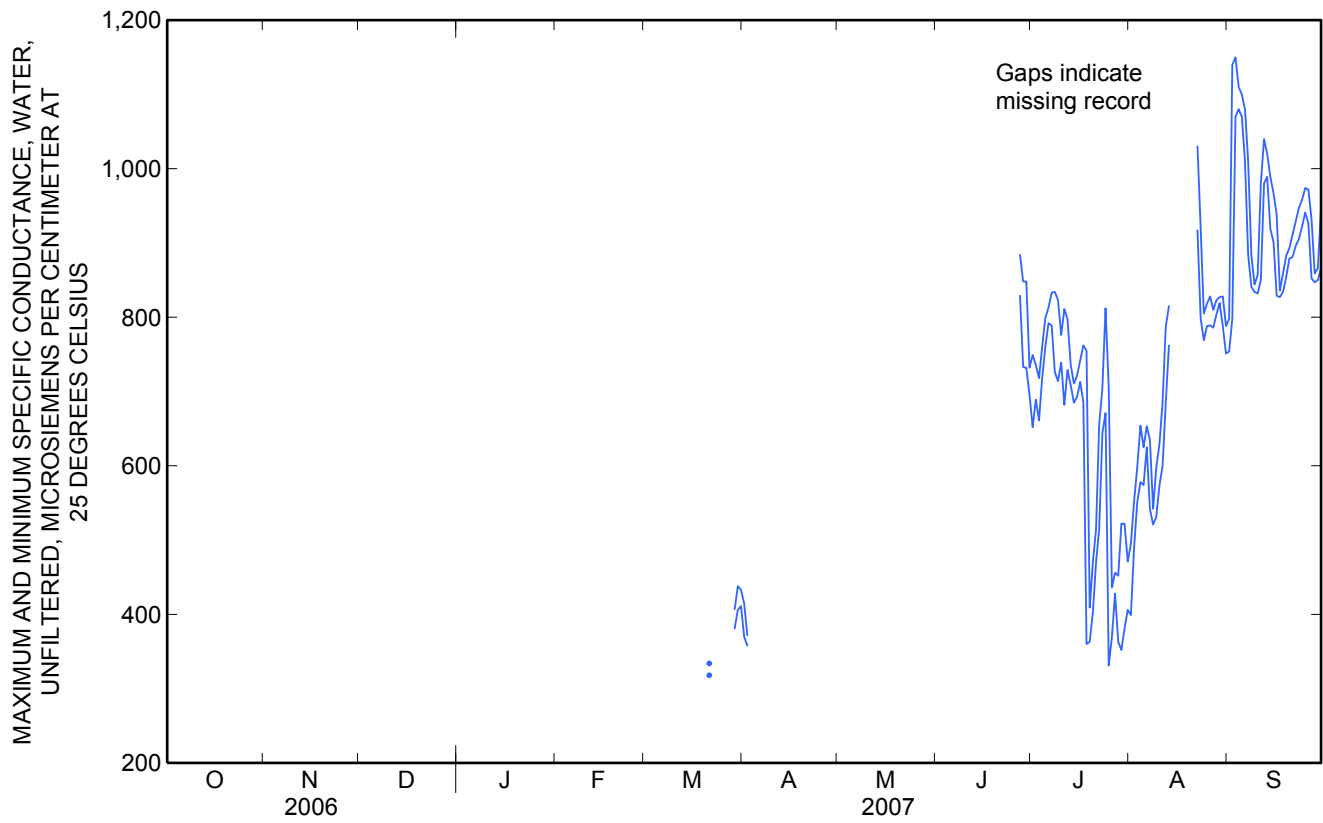
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	334	318
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	407	381
30	---	---	---	---	---	---	---	---	---	---	438	406
31	---	---	---	---	---	---	---	---	---	---	433	411
Month	---	---	---	---	---	---	---	---	---	---	---	---

03208500 RUSSELL FORK AT HAYSI, VA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	415	370	---	---	---	---	749	652	495	399	798	754
2	372	358	---	---	---	---	736	689	552	490	1,140	798
3	---	---	---	---	---	---	718	661	598	551	1,150	1,070
4	---	---	---	---	---	---	760	718	654	578	1,110	1,080
5	---	---	---	---	---	---	799	760	625	574	1,100	1,070
6	---	---	---	---	---	---	813	792	653	625	1,080	1,010
7	---	---	---	---	---	---	833	789	635	542	1,010	884
8	---	---	---	---	---	---	834	726	542	521	884	841
9	---	---	---	---	---	---	823	714	597	531	844	834
10	---	---	---	---	---	---	776	739	629	573	857	832
11	---	---	---	---	---	---	811	682	685	600	980	850
12	---	---	---	---	---	---	797	729	787	685	1,040	980
13	---	---	---	---	---	---	736	709	815	762	1,020	989
14	---	---	---	---	---	---	711	685	---	---	989	919
15	---	---	---	---	---	---	721	693	---	---	967	901
16	---	---	---	---	---	---	742	713	---	---	938	829
17	---	---	---	---	---	---	762	685	---	---	836	827
18	---	---	---	---	---	---	755	360	---	---	859	834
19	---	---	---	---	---	---	409	363	---	---	883	854
20	---	---	---	---	---	---	470	403	---	---	893	879
21	---	---	---	---	---	---	515	470	---	---	911	881
22	---	---	---	---	---	---	656	515	1,030	917	929	896
23	---	---	---	---	---	---	704	644	921	799	947	905
24	---	---	---	---	---	---	812	671	805	769	958	922
25	---	---	---	---	---	---	706	331	818	788	974	941
26	---	---	---	---	---	---	436	369	828	789	972	926
27	---	---	---	---	884	829	456	428	810	786	931	852
28	---	---	---	---	848	733	452	363	823	804	859	847
29	---	---	---	---	848	732	522	352	827	819	866	850
30	---	---	---	---	732	696	522	381	828	788	949	866
31	---	---	---	---	---	---	471	406	788	751	---	---
Month	---	---	---	---	---	---	834	331	---	---	1,150	754

03208500 RUSSELL FORK AT HAYSI, VA—Continued



03208500 RUSSELL FORK AT HAYSI, VA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

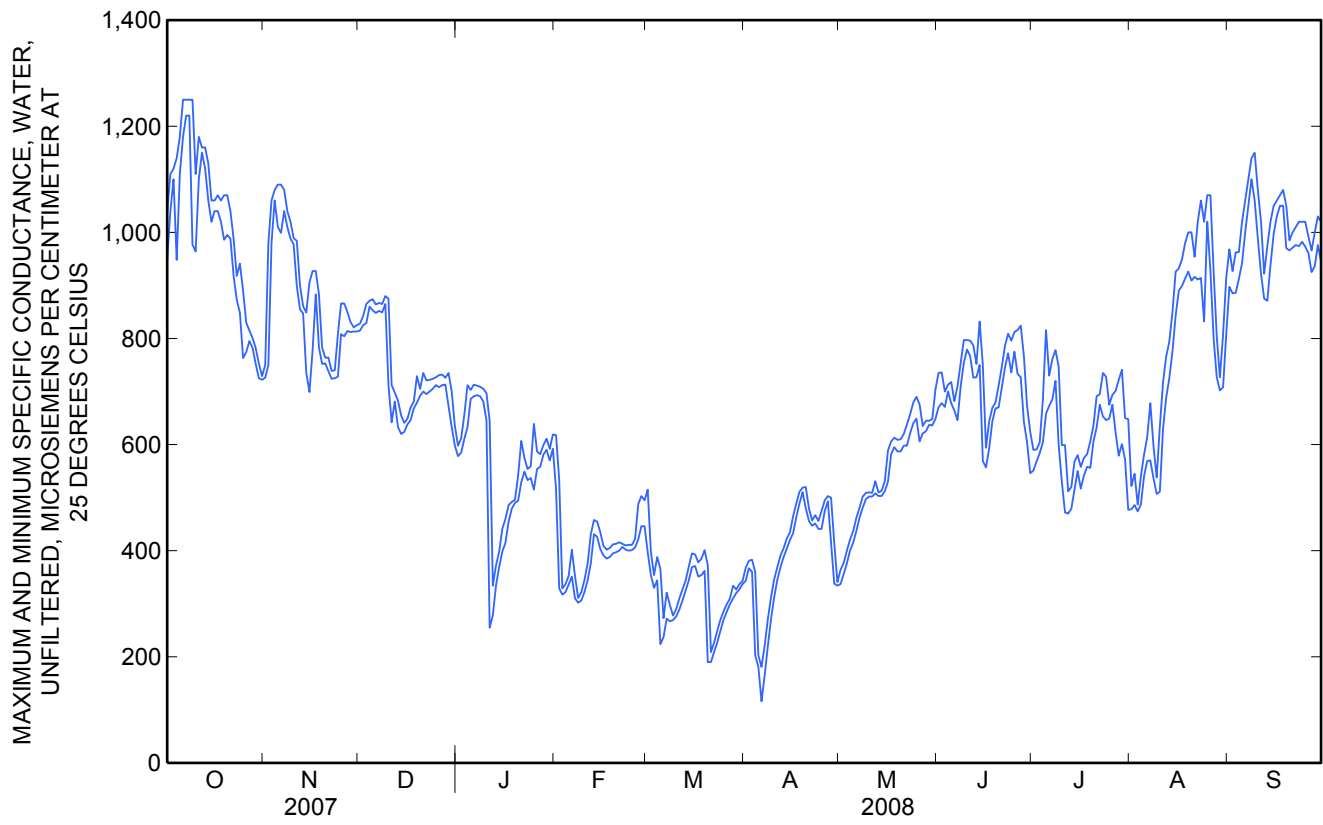
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	1,040	949	750	726	828	815	598	578	618	517	515	397
2	1,110	1,040	980	750	843	825	612	585	534	329	398	354
3	1,120	1,100	1,060	980	865	829	657	611	329	317	354	330
4	1,140	948	1,080	1,060	871	860	712	633	337	322	388	344
5	1,180	1,110	1,090	1,010	874	853	703	686	353	336	366	224
6	1,250	1,180	1,090	999	864	848	713	691	402	351	273	237
7	1,250	1,220	1,080	1,040	867	852	711	693	352	310	321	272
8	1,250	1,220	1,040	1,010	865	849	709	691	311	302	298	267
9	1,250	977	1,020	988	880	865	705	681	322	306	278	269
10	1,110	964	989	977	875	712	697	645	345	322	290	276
11	1,180	1,100	984	899	712	642	645	255	376	344	310	289
12	1,160	1,150	900	855	698	681	334	278	431	376	327	306
13	1,160	1,120	861	847	683	633	372	334	458	431	344	325
14	1,130	1,060	849	735	655	620	398	369	455	426	370	344
15	1,060	1,020	906	699	641	624	441	398	435	403	395	369
16	1,060	1,040	927	778	649	638	460	415	409	391	393	371
17	1,070	1,040	927	883	670	646	486	455	402	385	378	351
18	1,060	1,020	883	783	681	668	492	479	405	388	385	354
19	1,070	986	783	752	729	679	496	490	412	395	401	362
20	1,070	995	764	753	705	692	541	494	413	397	373	190
21	1,040	988	764	738	735	700	607	529	416	400	209	190
22	988	918	739	724	721	695	575	549	413	407	227	209
23	918	873	740	725	722	700	554	533	410	402	249	227
24	941	848	808	728	724	705	559	537	411	400	270	249
25	890	763	866	808	727	712	639	515	411	401	286	270
26	830	774	866	804	731	708	587	554	422	406	299	285
27	815	795	850	814	732	712	582	558	488	421	310	299
28	801	782	831	812	726	713	599	581	503	446	334	310
29	782	752	821	813	735	672	611	590	495	446	327	320
30	753	725	825	813	700	633	592	570	---	---	337	327
31	729	722	---	---	635	598	619	592	---	---	343	337
Month	1,250	722	1,090	699	880	598	713	255	618	302	515	190

03208500 RUSSELL FORK AT HAYSI, VA—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	368	343	364	337	735	670	590	551	522	478	968	897
2	381	367	377	356	736	678	591	568	545	486	927	885
3	383	360	400	376	700	671	604	584	487	474	962	886
4	360	203	421	400	713	700	685	604	540	487	963	912
5	203	181	437	415	718	678	816	658	581	540	1,020	942
6	181	116	462	437	682	664	730	673	614	569	1,060	1,000
7	221	165	481	462	710	646	761	685	678	570	1,100	1,050
8	271	220	502	481	754	710	778	720	597	536	1,140	1,100
9	312	271	509	497	797	754	747	599	538	507	1,150	1,060
10	346	312	510	502	797	779	599	530	634	511	1,080	988
11	369	345	509	502	796	767	599	472	717	629	1,020	922
12	391	369	531	508	787	726	512	470	766	688	922	875
13	405	388	510	503	752	727	520	479	794	725	974	871
14	423	404	513	503	832	750	568	515	850	776	1,020	938
15	435	420	531	512	750	569	580	550	926	843	1,050	997
16	465	433	589	530	594	557	558	517	932	890	1,060	1,030
17	489	463	606	582	643	592	575	542	949	899	1,070	1,050
18	511	489	613	595	669	643	582	558	980	913	1,080	1,050
19	519	510	609	587	679	668	606	556	1,000	926	1,050	970
20	520	480	610	587	711	670	636	606	1,000	909	985	966
21	480	456	620	598	746	707	691	632	954	916	1,000	971
22	457	447	638	598	786	745	695	675	1,020	911	1,010	976
23	467	451	657	621	809	772	735	653	1,060	914	1,020	974
24	456	441	679	640	796	736	728	646	1,020	832	1,020	982
25	475	441	690	649	812	775	675	649	1,070	1,020	1,020	973
26	495	475	676	606	816	733	694	675	1,070	927	992	961
27	503	493	635	621	824	727	701	623	927	801	966	925
28	500	415	645	625	767	643	722	579	804	727	1,000	936
29	415	338	645	637	673	604	741	601	727	702	1,030	976
30	341	334	648	636	624	546	650	572	807	708	1,020	945
31	---	---	703	648	---	---	648	477	914	807	---	---
Month	520	116	703	337	832	546	816	470	1,070	474	1,150	871

03208500 RUSSELL FORK AT HAYSI, VA—Continued



03208500 RUSSELL FORK AT HAYSI, VA—Continued

 TEMPERATURE, WATER, DEGREES CELSIUS
 WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

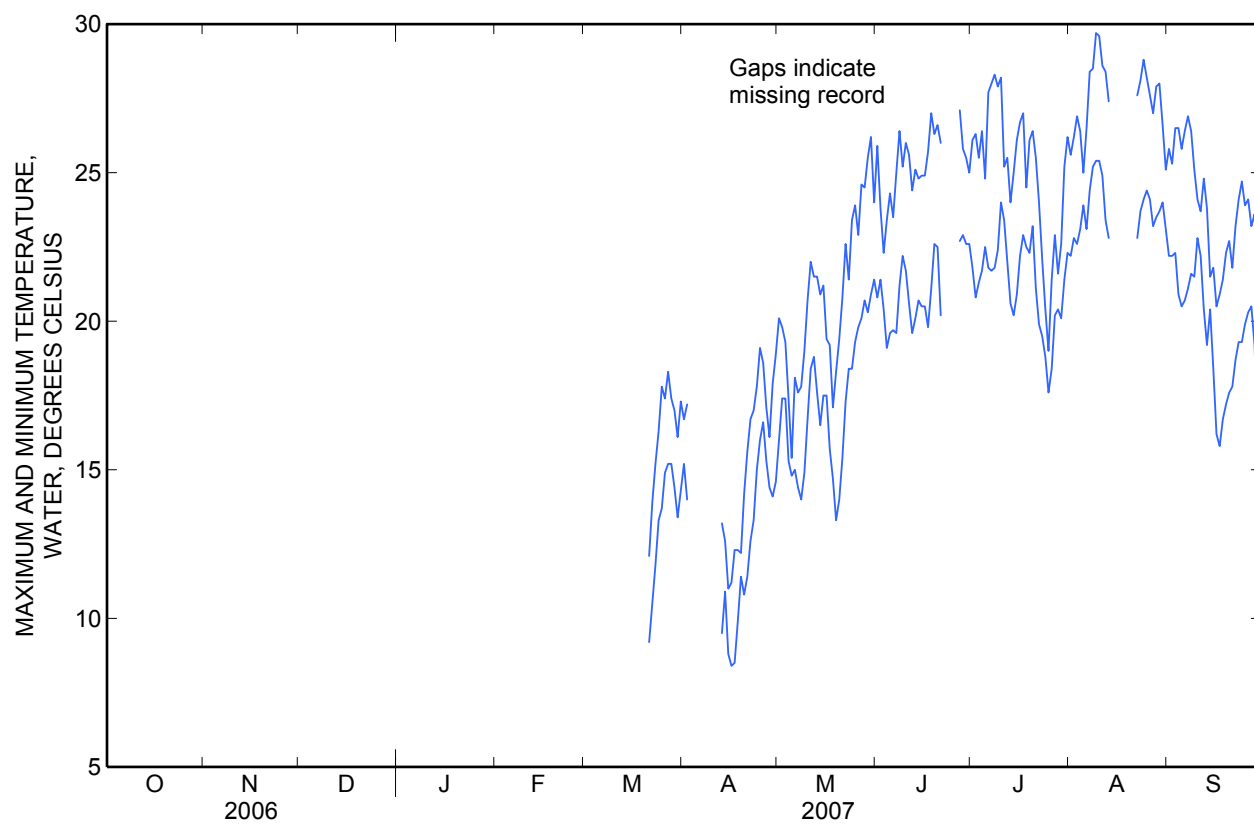
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
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9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	12.1	9.2
22	---	---	---	---	---	---	---	---	---	---	13.9	10.5
23	---	---	---	---	---	---	---	---	---	---	15.2	11.8
24	---	---	---	---	---	---	---	---	---	---	16.3	13.3
25	---	---	---	---	---	---	---	---	---	---	17.8	13.7
26	---	---	---	---	---	---	---	---	---	---	17.4	14.9
27	---	---	---	---	---	---	---	---	---	---	18.3	15.2
28	---	---	---	---	---	---	---	---	---	---	17.4	15.2
29	---	---	---	---	---	---	---	---	---	---	17.0	14.4
30	---	---	---	---	---	---	---	---	---	---	16.1	13.4
31	---	---	---	---	---	---	---	---	---	---	17.3	14.3
Month	---	---	---	---	---	---	---	---	---	---	---	---

03208500 RUSSELL FORK AT HAYSI, VA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	16.7	15.2	20.1	16.0	25.9	20.8	26.1	21.8	25.6	22.2	25.8	22.2
2	17.2	14.0	19.8	17.4	23.8	21.4	26.3	20.8	26.2	22.8	25.3	22.2
3	---	---	19.3	17.4	22.3	20.4	25.5	21.3	26.9	22.6	26.5	22.3
4	---	---	17.4	15.3	23.4	19.1	26.4	21.7	26.4	23.1	26.5	20.9
5	---	---	15.4	14.8	24.3	19.6	24.8	22.5	25.0	23.9	25.8	20.5
6	---	---	18.1	15.0	23.5	19.7	27.7	21.8	26.5	23.1	26.4	20.7
7	---	---	17.6	14.4	25.0	19.6	28.0	21.7	28.4	24.4	26.9	21.1
8	---	---	17.8	14.0	26.4	21.2	28.3	21.8	28.5	25.2	26.4	21.6
9	---	---	19.0	14.9	25.2	22.2	27.9	22.4	29.7	25.4	25.1	21.5
10	---	---	20.7	16.7	26.0	21.7	28.2	24.0	29.6	25.4	24.1	22.8
11	---	---	22.0	18.4	25.6	20.6	25.2	23.4	28.6	24.9	23.7	22.2
12	---	---	21.5	18.8	24.4	19.6	25.5	22.0	28.4	23.4	24.8	20.4
13	13.2	9.5	21.5	17.6	25.1	20.1	24.0	20.6	27.4	22.8	23.8	19.2
14	12.6	10.9	20.9	16.5	24.8	20.7	25.0	20.2	---	---	21.5	20.4
15	11.0	8.8	21.2	17.5	24.9	20.5	26.1	20.9	---	---	21.8	18.4
16	11.2	8.4	19.4	17.5	24.9	20.5	26.7	22.2	---	---	20.5	16.2
17	12.3	8.5	19.2	15.7	25.7	19.8	27.0	22.9	---	---	20.9	15.8
18	12.3	9.9	17.1	14.7	27.0	21.1	24.5	22.5	---	---	21.4	16.7
19	12.2	11.4	18.3	13.3	26.3	22.6	26.1	22.3	---	---	22.3	17.2
20	14.2	10.8	19.4	14.0	26.6	22.5	26.4	23.2	---	---	22.7	17.6
21	15.6	11.4	20.8	15.4	26.0	20.2	25.5	21.1	---	---	21.8	17.8
22	16.7	12.6	22.6	17.3	---	---	24.0	19.9	27.6	22.8	23.2	18.7
23	17.0	13.3	21.4	18.4	---	---	22.1	19.5	28.1	23.7	24.1	19.3
24	17.8	15.0	23.4	18.4	---	---	20.4	18.8	28.8	24.1	24.7	19.3
25	19.1	16.0	23.9	19.3	---	---	19.0	17.6	28.2	24.4	23.9	19.9
26	18.6	16.6	22.9	19.8	---	---	21.4	18.4	27.6	24.1	24.1	20.3
27	17.1	15.3	24.6	20.1	27.1	22.7	22.9	20.2	27.0	23.2	23.2	20.5
28	16.1	14.4	24.5	20.7	25.8	22.9	21.6	20.4	27.9	23.5	23.6	19.2
29	17.9	14.1	25.5	20.3	25.5	22.6	22.6	20.1	28.0	23.7	21.3	16.2
30	18.9	14.6	26.2	20.9	25.0	22.6	25.2	21.4	26.6	24.0	20.5	14.9
31	---	---	24.0	21.4	---	---	26.2	22.3	25.1	23.1	---	---
Month	---	---	26.2	13.3	---	---	28.3	17.6	---	---	26.9	14.9

03208500 RUSSELL FORK AT HAYSI, VA—Continued



03208500 RUSSELL FORK AT HAYSI, VA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

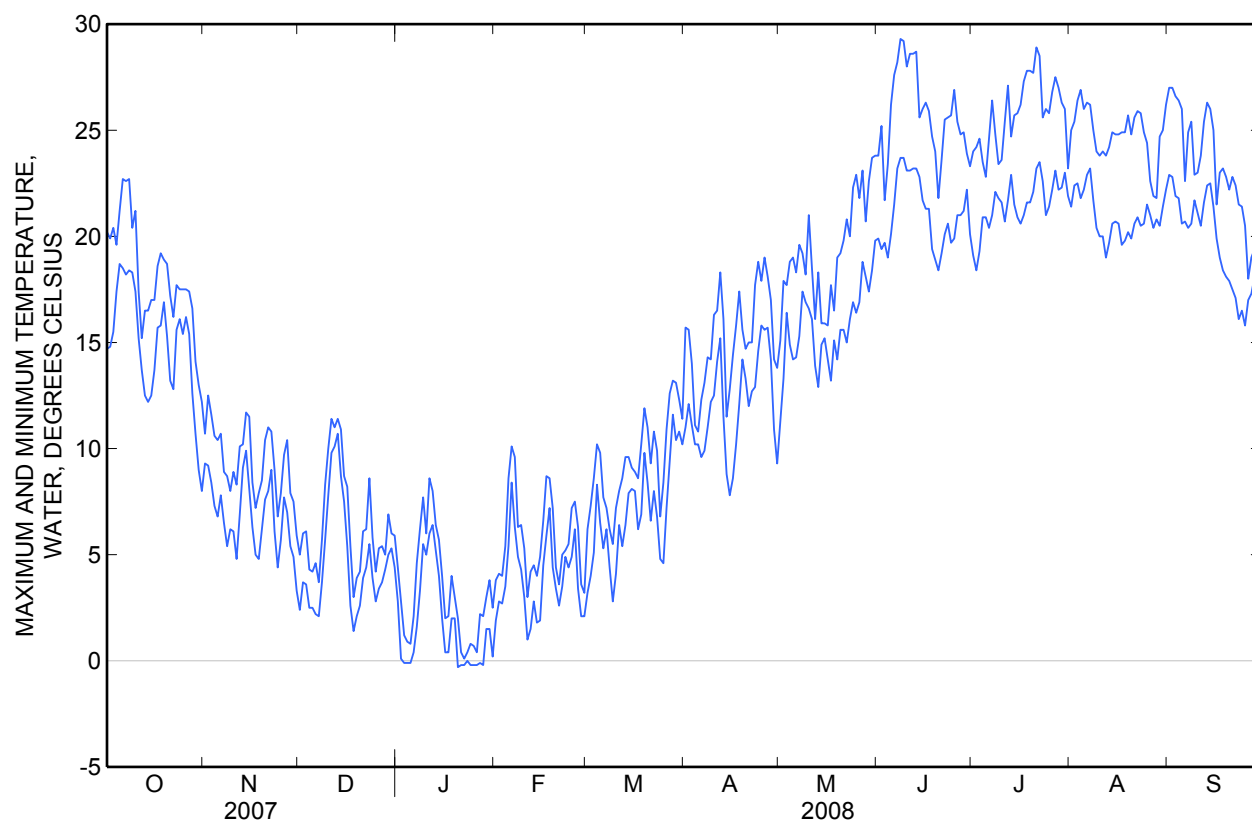
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	20.2	14.7	10.7	9.3	5.0	2.4	4.4	2.8	3.8	1.9	6.2	3.2
2	19.9	14.8	12.5	9.2	6.0	3.7	2.8	0.1	4.1	2.8	7.3	4.0
3	20.4	15.5	11.6	8.4	6.1	3.6	1.2	-0.1	4.0	2.7	8.6	5.1
4	19.6	17.4	10.6	7.3	4.3	2.5	0.9	-0.1	5.4	3.5	10.2	8.3
5	21.2	18.7	10.4	6.8	4.2	2.5	0.8	-0.1	8.6	5.4	9.8	6.5
6	22.7	18.5	10.7	7.8	4.6	2.2	2.1	0.4	10.1	8.4	7.7	5.3
7	22.6	18.2	8.9	6.5	3.7	2.1	4.6	1.6	9.6	6.3	7.2	6.2
8	22.7	18.4	8.7	5.4	5.7	3.7	6.2	3.3	6.3	4.9	6.2	4.4
9	20.4	18.3	8.0	6.2	8.3	5.7	7.7	5.5	6.4	4.3	5.5	2.8
10	21.2	17.4	8.9	6.1	10.0	7.8	6.0	5.0	5.3	3.0	7.2	4.1
11	17.4	15.2	8.3	4.8	11.4	9.8	8.6	6.0	3.0	1.0	8.0	6.4
12	15.2	13.7	10.1	6.9	11.0	10.1	8.0	6.4	4.2	1.5	8.6	5.4
13	16.5	12.5	10.2	9.1	11.4	10.7	6.4	5.2	4.5	2.8	9.6	6.4
14	16.5	12.2	11.7	9.9	10.9	8.7	5.7	4.0	4.0	1.8	9.6	7.9
15	17.0	12.5	11.5	8.1	8.7	7.5	4.0	2.0	4.9	1.9	9.1	8.1
16	17.0	13.7	8.4	6.3	8.2	5.4	2.0	0.4	6.6	4.5	8.9	8.0
17	18.6	15.7	7.2	5.0	5.4	2.6	2.1	0.4	8.7	5.9	8.6	6.2
18	19.2	15.8	7.9	4.8	3.0	1.4	4.0	2.0	8.6	7.2	10.2	6.9
19	18.9	16.9	8.5	6.2	3.9	2.1	3.0	2.0	7.2	4.4	11.9	9.8
20	18.7	15.3	10.4	7.6	4.2	2.6	2.0	-0.3	4.4	3.4	11.0	8.4
21	17.2	13.2	11.0	8.0	6.1	3.9	0.4	-0.2	3.6	2.6	9.3	6.6
22	16.2	12.8	10.8	9.0	6.2	4.4	0.1	-0.2	5.0	3.5	10.8	8.0
23	17.7	15.6	9.0	6.1	8.6	5.5	0.4	0.0	5.2	4.9	9.9	6.8
24	17.5	16.1	6.8	4.4	5.8	3.9	0.8	-0.2	5.5	4.4	6.8	4.8
25	17.5	15.4	7.9	5.7	4.2	2.8	0.7	-0.2	7.2	4.9	8.4	4.6
26	17.5	16.2	9.7	7.7	5.3	3.4	0.4	-0.2	7.5	6.2	10.9	7.2
27	17.4	15.4	10.4	7.0	5.4	3.7	2.2	-0.1	6.3	3.4	12.6	9.4
28	16.6	12.6	7.9	5.4	5.0	4.3	2.1	-0.2	3.6	2.1	13.2	11.6
29	14.1	10.7	7.5	4.9	6.9	5.0	3.0	1.5	3.2	2.1	13.1	10.4
30	13.0	9.0	5.9	3.3	6.0	5.3	3.8	1.5	---	---	12.3	10.8
31	12.2	8.0	---	---	5.9	4.4	2.5	0.2	---	---	11.4	10.2
Month	22.7	8.0	12.5	3.3	11.4	1.4	8.6	-0.3	10.1	1.0	13.2	2.8

03208500 RUSSELL FORK AT HAYSI, VA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	15.7	11.0	15.1	11.3	23.8	19.9	24.0	19.1	25.0	21.4	27.0	22.9
2	15.6	12.1	17.9	13.3	25.2	19.4	24.2	18.4	25.4	22.4	27.0	22.8
3	14.0	11.1	17.7	16.4	21.7	19.7	24.6	19.3	26.4	22.5	26.6	21.9
4	11.1	10.2	18.8	14.9	23.4	19.0	23.5	20.9	26.9	21.8	26.4	21.8
5	10.8	10.2	19.0	14.2	26.2	20.1	22.8	20.9	26.0	22.2	26.0	20.6
6	12.3	9.6	18.3	14.3	27.6	21.5	24.6	20.4	26.3	22.9	22.6	20.7
7	13.1	9.9	19.6	15.3	28.2	23.2	26.4	21.0	26.2	23.2	24.9	20.4
8	14.3	11.0	19.2	17.4	29.3	23.7	24.8	22.1	25.0	21.7	25.4	20.6
9	14.2	12.2	18.2	16.9	29.2	23.7	23.4	21.8	24.0	20.4	22.9	21.7
10	16.3	12.5	21.0	16.6	28.0	23.1	23.6	21.6	23.8	20.0	23.0	21.1
11	16.5	14.1	18.5	16.1	28.6	23.1	25.4	20.7	24.0	20.0	23.8	20.5
12	18.3	15.2	16.1	13.9	28.6	23.2	27.1	21.7	23.8	19.0	25.4	21.6
13	16.1	11.5	18.3	12.9	28.7	23.2	24.7	22.9	24.2	19.7	26.3	22.4
14	11.5	8.8	15.9	14.9	25.6	22.8	25.7	21.5	24.9	20.6	26.0	22.5
15	12.8	7.8	15.9	15.2	26.0	21.7	25.8	20.9	24.8	20.7	25.0	21.4
16	14.4	8.6	15.8	14.2	26.3	21.3	26.2	20.6	24.8	20.6	21.5	19.9
17	15.8	10.2	17.7	13.2	25.9	21.3	27.3	21.0	24.9	19.6	23.0	19.0
18	17.4	12.1	16.5	15.1	24.7	19.4	27.8	21.6	24.9	19.8	23.2	18.4
19	15.6	14.2	19.0	14.2	24.0	18.9	27.8	21.6	25.7	20.2	22.8	18.1
20	14.7	13.3	19.2	15.6	21.8	18.4	27.7	22.1	24.8	19.9	22.2	17.9
21	15.0	12.0	19.8	15.6	23.6	19.2	28.9	23.2	25.6	20.6	22.8	17.5
22	15.0	12.7	20.8	15.0	25.5	20.1	28.5	23.5	25.9	20.9	22.4	17.1
23	17.7	12.9	20.0	16.1	25.6	20.6	25.6	22.6	25.8	20.5	21.5	16.1
24	18.8	14.6	22.3	16.9	25.7	19.7	26.0	21.0	24.9	20.6	21.4	16.5
25	17.9	15.8	22.9	16.4	26.9	19.9	25.8	21.4	24.4	21.5	20.5	15.8
26	19.0	15.6	21.8	16.9	25.4	21.0	26.8	22.2	22.6	21.0	18.0	17.0
27	18.1	15.7	23.1	18.8	24.8	21.0	27.5	23.1	21.9	20.4	19.0	17.3
28	17.0	14.2	20.7	18.1	24.9	21.2	27.0	22.2	21.8	20.8	19.4	18.1
29	14.2	10.9	22.6	17.4	23.9	22.2	26.3	22.3	24.7	20.5	21.3	17.9
30	13.8	9.3	23.7	18.4	23.3	20.1	26.0	23.0	25.0	21.4	18.9	17.2
31	---	---	23.8	19.8	---	---	23.2	21.9	26.2	22.2	---	---
Month	19.0	7.8	23.8	11.3	29.3	18.4	28.9	18.4	26.9	19.0	27.0	15.8

03208500 RUSSELL FORK AT HAYSI, VA—Continued



WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

[QC, quality control sample]

Date	Time	Sample medium and type	Specific conductance, wat unf μS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)	Data base number	Medium code
Jan							
17...	1035	Surface water, regular	136	5.5	11.5	01	WS
Feb							
23...	1015	Surface water, regular	--	4.8	9.6	01	WS
Apr							
03...	1345	Surface water, regular	--	16.2	9.8	01	WS
May							
31...	1140	Surface water, regular	386	22.3	9.6	01	WS
Jul							
16...	1140	Surface water, regular	721	23.8	10.9	01	WS
16...	1140	QC - Surface water, replicate	721	--	11.2	02	WSQ
Aug							
14...	1205	Surface water, regular	815	24.5	38.4	01	WS

03208500 RUSSELL FORK AT HAYSI, VA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Date	Time	Sample medium and type	Specific conductance, wat unf $\mu\text{S}/\text{cm}$ 25 degC (00095)	Temperature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)
Oct					
03...	1000	Surface water, regular	960	16.0	52.8
10...	1040	Surface water, regular	1,030	18.8	49.3
Nov					
06...	1155	Surface water, regular	1,030	10.5	46.9
Dec					
19...	0945	Surface water, regular	687	2.6	25.9
Jan					
16...	1235	Surface water, regular	428	1.9	15.8
Feb					
12...	1200	Surface water, regular	383	2.5	13.9
Mar					
19...	1120	Surface water, regular	385	10.6	14.9
May					
14...	1125	Surface water, regular	437	15.7	12.3